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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/578,218	05/23/2000	Gaurav Banga	103.1038.01	4633

22883 7590 09/24/2004  
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EXAMINER

BAUGH, APRIL L

ART UNIT PAPER NUMBER

2141

DATE MAILED: 09/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/578,218	<b>Applicant(s)</b> BANGA, GAURAV	
	<b>Examiner</b> April L Baugh	<b>Art Unit</b> 2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                       |                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____                                                |

## **DETAILED ACTION**

### ***Response to Amendment***

Claims 1-6 and 8-21 are now pending.

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1 and 8 have been considered but are moot in view of the new ground(s) of rejection.
2. Applicant's arguments filed 8/02/04 have been fully considered but they are not persuasive. Applicant argued that Yang et al. does not teach a third message being generated in an attempt to interfere with communication on said communication link when said communication link is configured as half-duplex, and determining a protocol mismatch exists in response to whether or not said attempt to interfere succeeds. The Examiner's position is that Yang et al. teaches the above feature (column 3, line 56 through column 4, line 23 and column 5, lines 16-44).

Yang et al. teaches, 'Once full duplex communication begins, the two participating stations continuously monitor the point-to-point communication link to ensure that both stations and the link continue to function properly...in case of a failure or one ore both stations...each station reverts to half-duplex communications'. Yang et al. further teaches, 'The link is periodically tested during full duplex operation to ensure that the connection is still valid.' The claims states that the third message attempts to interfere with the link but that this is only possible if the link is configured half-duplex, thus there would be no interference if the link if

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full-duplex. Similarly in Yang et al. with continuous monitoring a third message and so forth are continually sent between the stations with an assumption that both stations are able and configured as full-duplex, and if this configuration is valid there will be no interference. But Yang et al. further states the possibility of a failure and the need to revert to half-duplex communication, and this failure would be a result of one or both stations being truly configured as half-duplex. Therefore messages are continuously sent to continue to validate the full-duplex connection and a failure will occur when there is truly a half-duplex configuration, and thus a protocol mismatch.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 3 and 13-21 rejected under 35 U.S.C. 102(b) as being unpatentable by US Patent No. 5,121,382 to Yang et al.

Regarding claims 3 and 13, Yang et al. teaches a method and device, including steps of at a first device coupled to a communication link (column 1, lines 17-19 and 23-34 and 42-50), generating at least one first message over said communication link to a set of second devices (column 3, lines 56-68), said one first message being disposed so that its receipt at said set of second devices causes said set of second devices to generate one or more second messages over said communication link in response thereto; monitoring receipt of said second messages at said

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first device (column 4, lines 1-14); at said first device, generating at least one third message over said communication link to said set of second devices (column 4, lines 15-22), said one third message being generated in an attempt to interfere with communication on said communication link when said communication link is configured as half-duplex; and determining whether or not a protocol mismatch exists between said first device and any of said set of second devices in response to whether or not said attempt to interfere succeeds (column 5, lines 16-44).

Regarding claim 14 and 18, Yang et al. teaches a method as in claim 13 and 3, including steps of at said first device, adjusting protocol parameters to match all of said second devices (column 1, lines 39-50).

Referring to claims 15 and 19, Yang et al. teaches a method as in claim 13 and 3, wherein at least one of said first device and set of second devices includes an end-host or a switch (column 1, lines 53-60).

Referring to claims 16 and 20, Yang et al. teaches a method as in claim 13 and 3, wherein said communication link includes an Ethernet (column 1, lines 51-55 and column 4, lines 46-68 and column 5, lines 1-15).

Regarding claim 17 and 21, Yang et al. teaches a method as in claim 13 and 3, wherein said protocol mismatch relates to configuration of said communication link as half-duplex or full-duplex (column 1, lines 9-13 and 29-34).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 4-6, and 8-12 rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,121,382 to Yang et al. in view of Gardner et al. (US Patent 6,580,697)

Regarding claim 1 and 8, Yang et al. teaches a method and device, including steps of at a first device coupled to a communication link (column 1, lines 17-19 and 23-34 and 42-50), generating at least on first message to a set of second devices coupled to said communication link (column 3, lines 56-68), said one first message being disposed so that its receipt at said set of second devices causes said set of second devices to generate one or more second messages in response thereto (column 4, lines 1-14).

Yang et al. does not teach determining a count of said second messages received at said first device; determining whether or not a protocol mismatch exists between said first device and any of said set of second devices, in response to said count of said second messages. Gardner et al. teaches determining a count of said second messages received at said first device; determining whether or not a protocol mismatch exists between said first device and any of said set of second devices, in response to said count of said second messages (column 4, lines 28-37). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the auto-detection of duplex mismatch of Yang et al. by determining a count of said second messages received at said first device; determining whether or not a protocol mismatch exists between said first device and any of said set of second devices, in response to said count of said second messages because if the count of second messages received is less than the count transmitted then there was a collision which auto-detects a duplex mismatch.

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Regarding claim 2 and 9, Yang et al. teaches a method as in claim 1 and 8, including steps of at said first device, adjusting protocol parameters to match all of said second devices (column 1, lines 39-50).

Referring to claims 4 and 10, Yang et al. teaches a method as in claim 1 and 8, wherein at least one of said first device and set of second devices includes an end-host or a switch (column 1, lines 53-60).

Referring to claims 5 and 11, Yang et al. teaches a method as in claim 1 and 8, wherein said communication link includes an Ethernet (column 1, lines 51-55 and column 4, lines 46-68 and column 5, lines 1-15).

Regarding claim 6 and 12, Yang et al. teaches a method as in claim 1 and 8, wherein said protocol mismatch relates to configuration of said communication link as half-duplex or full-duplex (column 1, lines 9-13 and 29-34).

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to April L Baugh whose telephone number is 703-305-5317. The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 703-305-4003. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ALB

  
RUPAL DHARIA  
SUPERVISORY PATENT EXAMINER